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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,861	09/12/2003	Feng Chen	TI-35764 (032350.B522)	8973
23494	7590	04/21/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED				NGUYEN, LINH V
P O BOX 655474, M/S 3999				ART UNIT
DALLAS, TX 75265				PAPER NUMBER
				2819

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/661,861	CHEN ET AL.
Examiner	Art Unit	
Linh V Nguyen	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 September 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 20 is/are allowed.

6) Claim(s) 1-3,6,8-12,15 and 17-19 is/are rejected.

7) Claim(s) 4,5,7,13,14 and 16 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09 December 2003 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/12/03.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 - 3, 6, 8 -12, 15 and 17-19, are rejected under 35 U.S.C. 102(e) as being anticipated by Gulati et al. U.S. Patent No. 6,686,860.

Regarding to claims 1, 10 and 19, Fig. 1 of Gulati et al. disclose a system for configuring an analog-to-digital converter (Fig. 1 [100]) Col. 5 line 66), comprising: receiving a control signal (output signal of Fig. 1[102], Col. 6 line 46), and an input analog signal (Fig. 1[AIN]) at an analog-to-digital converter (Fig. 1[100]), the control signal having a state selected from a group consisting of a first state and a second state (Col. 6 lines 5 – 8), the first state associated with a first configuration, the second state associated with a second configuration (Col. 6 lines 11 – 17), the input analog signal comprising information; performing the following if the control signal has the first state: configuring the analog-to-digital-converter in the first configuration response to the control signal; and generating a digital signal comprising a first digital signal according to a pipeline conversion (Col. 6 lines 1 – 25); performing the following if the control signal has the second state: configuring the analog-to-digital converter in the second configuration in response to the control signal; and generating the digital signal comprising a second digital signal according to a multi-stage sigma delta modulation conversion; and processing the digital signal to yield a digital output, the digital output comprising the information (Col. 6 lines 1 – 25).

Regarding to claims 2 and 11, wherein the first configuration comprises a pipeline analog-to-digital converter configuration (Col. 7 lines 20 – 23, and Fig. 4).

Regarding to claims 3 and 12, wherein the second configuration comprises a multi-stage noise shaping analog-to-digital converter configuration (Col. 7 lines 26 – 30, and Fig. 3).

Regarding to claims 6 and 15, wherein processing the digital signal yield the digital output further comprises: decoding the digital signal by performing error correction of the digital signal; and generating a binary code corresponding the decoded digital signal, the binary code comprising the information (Col. 6 lines 18 – 25).

Regarding to claims 8, 9, 17 and 18 wherein the first state is a low state control signal (pipeline mode), and the second state is a high state control signal (Sigma-delta mode).

Allowable Subject Matter

2. Claims 4, 5, 7, 13, 14 and 16, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claim 20 is allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Tokar can be reached at (571) 272-1812. The fax phone numbers for the organization where this application or proceeding is assigned are (703-872-9306) for regular communications and (703-872-9306) for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LVN

04/9/2004


Michael J. Tokar
Supervisory Patent Examiner
Technology Center 2800